

1
Seminar notes
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MITCHELL Model (P-3610)

$$C = 6.47 - .36 OOL + 28.3 C_v - 1.36 VL \\ + .89 FL - .37 M + .09 PD$$

$$\bar{R}^2 = .68$$

PROVINCE ANALYSIS

$$\hat{I} = 81.9 + 188g + .31p$$

(1.8) (2.8)

$$R^2 = .29$$

$$F = 4.6$$

I = household income, 100's VN#

g = gini index

p = population density, km.⁻²

$$\hat{I} = 134 + 41C_v + .30p$$

(1.2) (2.6)

$$R^2 = .23$$

C_v = coefficient of variation

$$F = 3.45$$

C_{vm} = " " " (MITCHELL)

$$\hat{I} = 78 + 67C_{vm} + .33p$$

(2.7) (3.2)

$$R^2 = .38$$

$$F = 7.1$$

SIMPLE CORRELATION COEFFICIENTS

	C_{vm}	C_v	g	p
I	.33	.09	.20	.43

PROVINCIAL ANALYSIS (N=26)

$$\text{GVN CONTROL} = f(\text{INCOME, REGIONAL, HOA HAO}) + e$$

$$\hat{C} = -11.9 + .16 I + .31 D_c I - 37 D_c + .75 HH$$

(2.82)
(2.50)
(-1.55)
(5.43)

$$\bar{R}^2 = .66 \quad F = 13$$

I = MEAN HOUSEHOLD INCOME

HAMLET ANALYSIS (N=94)

$$\hat{S}_0 = 1.62 + .019 I' + .04 D_c I' - 1.44 D_c$$

(3.25)
(2.41)
(-1.98)

$$R^2 = .25 \quad F = 10.1$$

I' = ADJUSTED PER CAPITA
INCOME

DECOMPOSITION OF THE GINI INDEX

QUANG TRI .40 ha. = SUBSISTENCE PLOT

AN GIANG

SUBSISTENCE PLOT = .24 ha

Gini Index = .45 = 2(A+B+C)

Gini Index = .62

SUBSISTENCE COMPONENT = .21

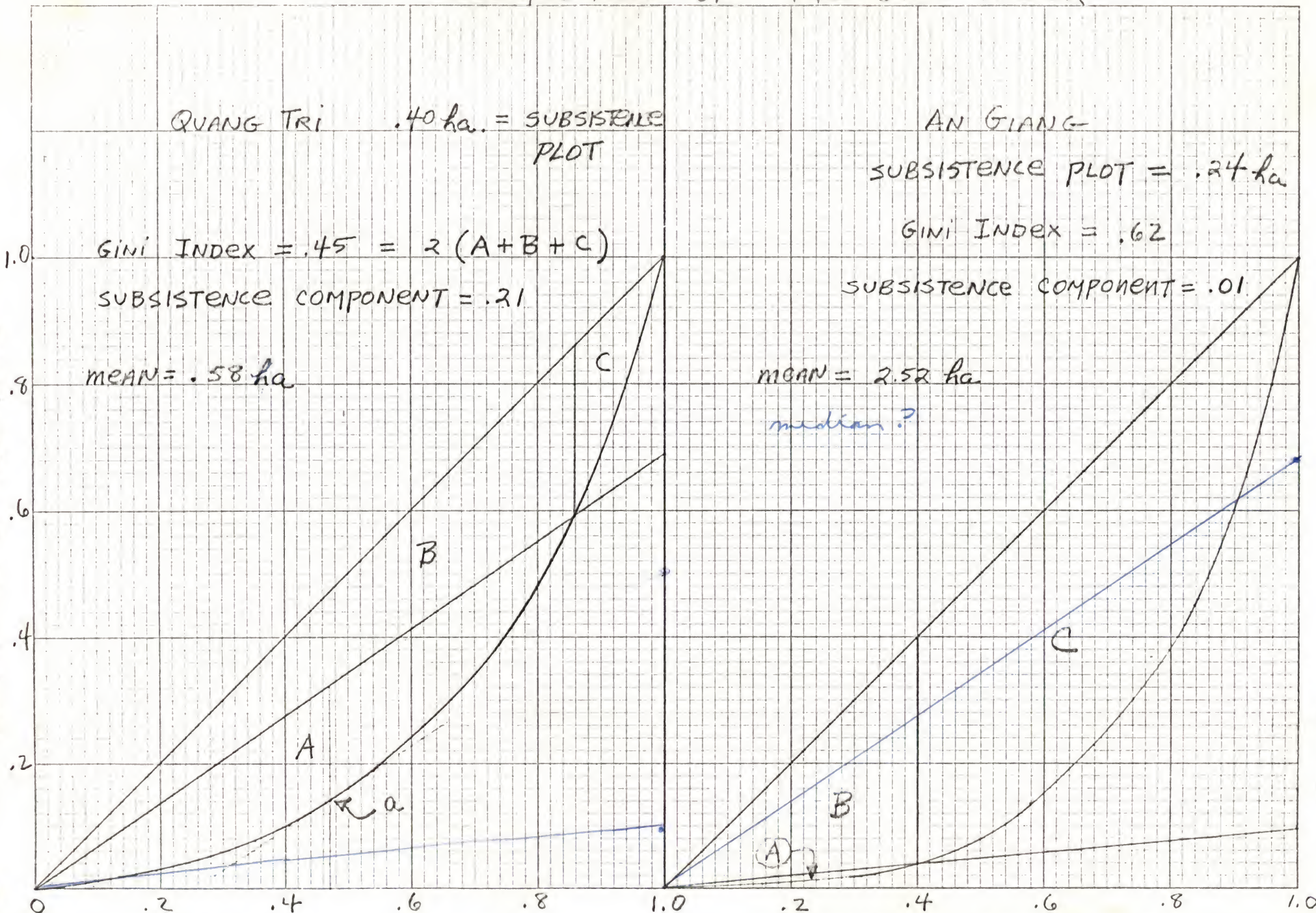
SUBSISTENCE COMPONENT = .01

MEAN = .58 ha

MEAN = 2.52 ha

median?

PROPORTION OF ALL LAND



PROPORTION OF ALL FARMS

PROPORTION OF ALL FARMS

5

GVN CONTROL = f (LAND INDEX, REGIONAL, HOA HOA)

$$\hat{C} = -11.2 + 12.8 \frac{\bar{L}}{L_s} - 13.5 \frac{\bar{L}}{L_s} D_s + .71 HH + 44.4 D_s$$

(4.70) (-4.70) (4.88) (3.87)

$$\bar{R}^2 = .65 \quad F = 12$$

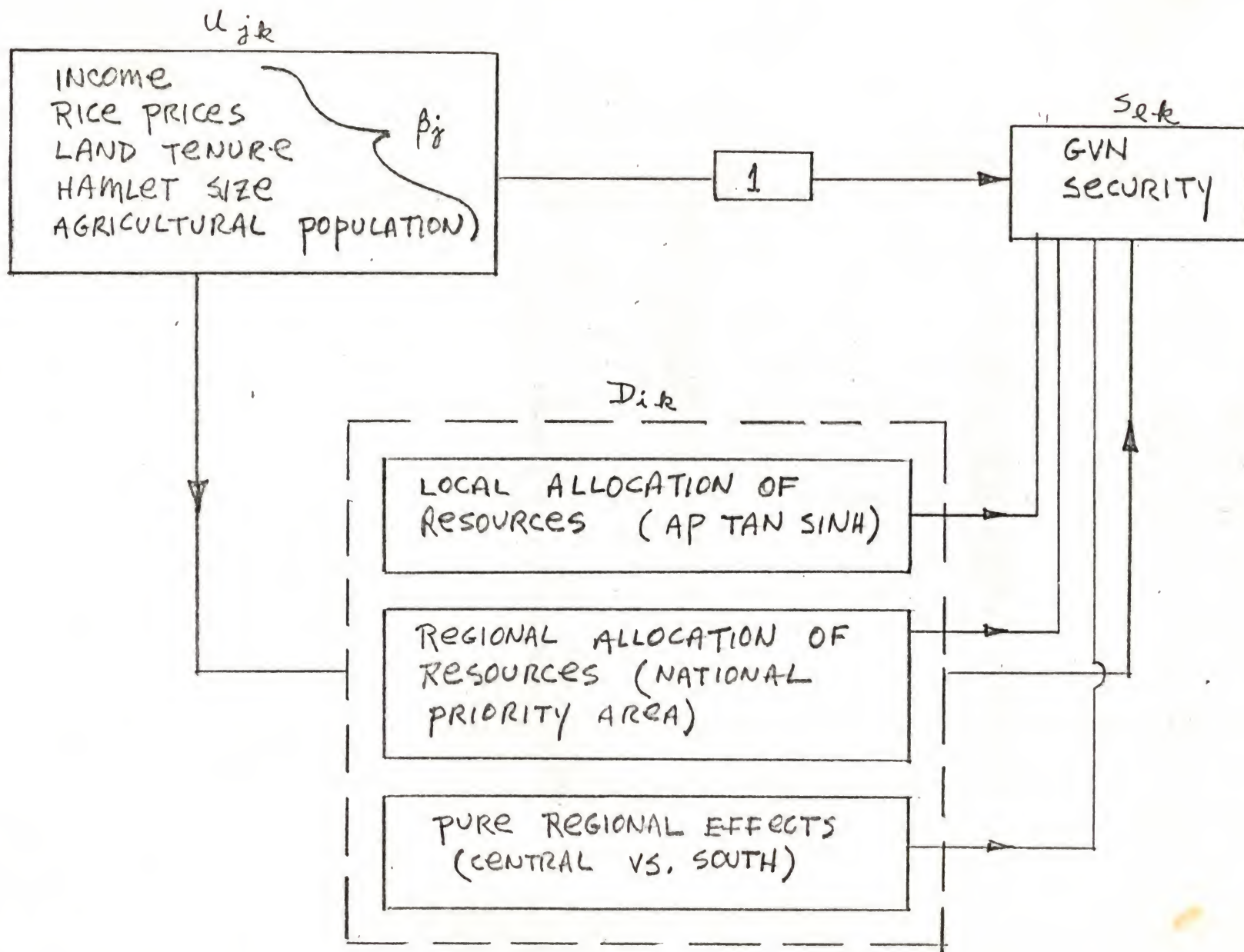
GVN CONTROL = f (LAND INDEX, INCOME,
REGIONAL, HOA HOA)

$$\hat{C} = -33.9 + 10.9 \frac{\bar{L}}{L_s} - 10.9 \frac{\bar{L}}{L_s} D_s + .76 HH + 17.3 D_s + .17 I$$

(5.43) (-5.13) (7.18) (1.68) (4.51)

$$\bar{R}^2 = .82 \quad F = 22.5$$

$$S_{ik} = (1 + D_{ik}) \beta_{ijk} u_{jk} + \epsilon_k$$



$$E(S_{jk}) = \sum_i \sum_j (1 + D_{ijk}) \beta_{ijk} u_{jk}$$

S_0 = OVERALL SECURITY INDEX

$$\hat{S}_0 = 2.31 + 1.04 u_1 + .69 u_2 - .31 u_4 - .37 u_5 + .25 u_6$$

(4.35) (3.89) (-3.05) (-3.05) (2.73)

$$+ D_1 \left[.37 - 1.09 u_1 - .74 u_2 \right] + D_2 \left[.43 - .46 u_3 \right]$$

(6.08) (-4.42) (-3.62) (2.88) (-2.10)

$$+ .29 D_3$$

(1.48)

$$R^2 = .61 \quad F = 11.52$$

$$\bar{R}^2 = .56$$

$$F_{req'd} @ .01 \approx 2.50$$

EIGHT HAMLET CLASSES			REGRESSION COEFFICIENTS OF STANDARDIZED VARIABLES							
	D_1	D_2	D_3	CONST.	u_1	u_2	u_3	u_4	u_5	u_6
1	0	0	0	2.31	1.04	.69	0	-.31	-.37	.25
2	0	0	1	2.60	1.04	.69	0	-.31	-.37	.25
3	0	1	0	2.74	1.04	.69	-.46	-.31	-.37	.25
4	0	1	1	3.03	1.04	.69	-.46	-.31	-.37	.25
5	1	0	0	2.68	-.05	-.05	0	-.31	-.37	.25
6	1	0	1	2.97	-.05	-.05	0	-.31	-.37	.25
7	1	1	0	3.40	-.05	-.05	-.46	-.31	-.37	.25
8	1	1	1	3.69	-.05	-.05	-.46	-.31	-.37	.25

D_1 = AP TAN SINH
 D_2 = CENTRAL VN
 D_3 = NAT'L. PRIORITY

$$u_j = \frac{\bar{X}_j - \bar{X}_j}{\sigma_{x_j}}$$

X_1 = CORRECTED PER CAPITA INCOME
 X_2 = NO. LAND OWNERS PER HA. ALL LAND
 X_3 = NO. LANDLESS TENANTS PER HA. ALL LAND
 X_4 = NO. HOLDINGS PER HOUSEHOLD
 X_5 = PRICE OF RICE (LOCAL)
 X_6 = HAMLET POPULATION

$S_1 = \text{HAMLET INFRASTRUCTURE INDEX}$

$$\hat{S}_1 = 2.02 + 1.00 u_1 + .63 u_2 - .28 u_4 - .35 u_5 + .19 u_6$$

(3.54) (3.04) (-2.34) (-2.46) (1.77)

$$+ D_1 \begin{bmatrix} .32 & -.77 u_1 & -.89 u_2 \end{bmatrix} + D_2 \begin{bmatrix} .61 & -.44 u_3 \end{bmatrix}$$

(4.22) (-2.66) (-3.74) (2.98) (-1.73)

$$+ .33 D_3$$

(1.45)

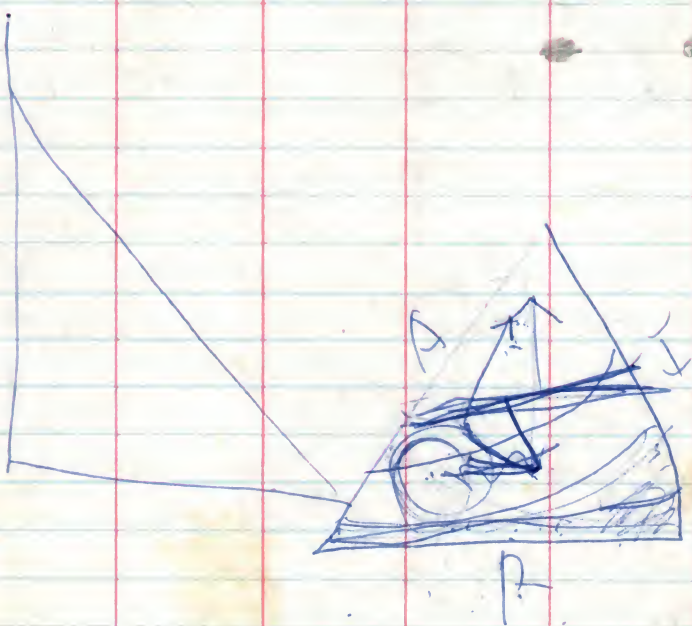
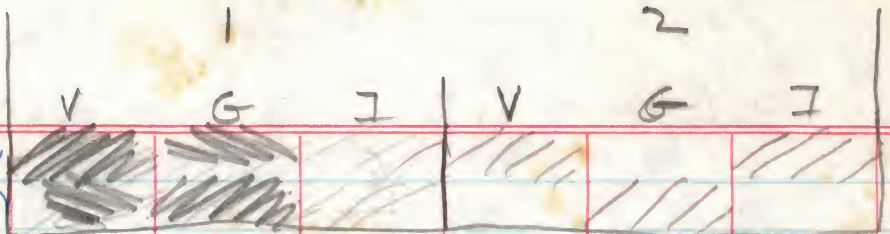
$$R^2 = .52 \quad F = 8.06$$

$$\bar{R}^2 = .46$$

$$F_{req'd @ .01} \approx 2.50$$

EIGHT HAMLET CLASSES				REGRESSION COEFFICIENTS OF STANDARDIZED VARIABLES						
	D_1	D_2	D_3	CONST.	u_1	u_2	u_3	u_4	u_5	u_6
1	0	0	0	2.02	1.00	.63	0	-.28	-.35	.19
2	0	0	1	2.35	1.00	.63	0	-.28	-.35	.19
3	0	1	0	2.63	1.00	.63	-.44	-.28	-.35	.19
4	0	1	1	2.96	1.00	.63	-.44	-.28	-.35	.19
5	1	0	0	2.34	.23	-.26	0	-.28	-.35	.19
6	1	0	1	2.67	.23	-.26	0	-.28	-.35	.19
7	1	1	0	2.95	.23	-.26	-.44	-.28	-.35	.19
8	1	1	1	3.28	.23	-.26	-.44	-.28	-.35	.19

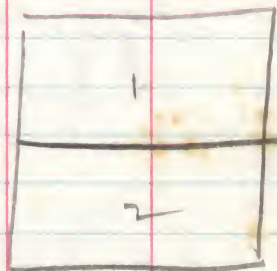
cover
no cover



opportunity to support
ind. incl. pref.

A	R	N
A	R	I

		opportunity			
		A	R	N	^{R A} Both
ind. indiv. pref.	A	+	+	+	+
	R				
	I				



terrain	cov	no cov
pop	V	G
section	1	2

